Double L Spreader-Buffer

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 10/17/2017 Revision date: 11/21/2017 Version: 2.0

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : Double L Spreader-Buffer

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Spreader/ Buffer

1.3. Details of the supplier of the safety data sheet

MarVista Resources
745 North Ave.
Corcoran, Ca. 93212 - USA
T 559-992-4535

1.4. Emergency telephone number

Emergency number : 24 Hour Emergency Response Chemtrec: 1-800-262-8200

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Flammable liquids Category 2	H225
Acute toxicity (oral) Category 4	H302
Skin corrosion/irritation Category 1C	H314
Serious eye damage/eye irritation Category 1	H318
Acute toxicity (inhalation) Category 4	H332
Specific target organ toxicity (repeated exposure) Category 2	H373

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS02 GHS05 GHS07

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H225 - Highly flammable liquid and vapor
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H332 - Harmful if inhaled
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) : P210 - Keep away from heat, hot surfaces, open flames, sparks. - No smoking
P233 - Keep container tightly closed
P240 - Ground/bond container and receiving equipment
P241 - Use explosion-proof electrical, lighting, ventilating equipment
P242 - Use only non-sparking tools
P243 - Take precautionary measures against static discharge
P261 - Do not breathe vapors, spray, mist, fume
P264 - Wash skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P280 - Wear eye protection, protective clothing, protective gloves
P301+P312 - If swallowed: Call a doctor, a POISON CENTER (800-222-1222) if you feel unwell
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a doctor, a POISON CENTER (800-222-1222)
P314 - Get medical advice/attention if you feel unwell
P321 - Specific treatment (see the first aid section on this label)
P330 - Rinse mouth
P363 - Wash contaminated clothing before reuse
P370+P378 - In case of fire: Use alcohol resistant foam, carbon dioxide (CO2) to extinguish
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P501 - Dispose of contents/container to comply with local, state, and federal regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
2-propanol	(CAS No) 67-63-0	30 - 40	Flam. Liq. 2, H225 STOT SE 3, H336
phosphoric acid	(CAS No) 7664-38-2	10 - 20	Skin Corr. 1A, H314

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. Call a physician immediately.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May cause drowsiness or dizziness.

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Burns.

Symptoms/injuries after eye contact : Serious damage to eyes.

Symptoms/injuries after ingestion : Burns.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Highly flammable liquid and vapor.

Reactivity : Highly flammable liquid and vapor.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : Ventilate spillage area. NO open flames, NO sparks, and NO smoking. Avoid contact with skin and eyes. Do not breathe vapors, spray, mist, fume.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8 Exposure controls/personal protection" ".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 8 : Exposure-controls/personal protection"".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid contact with skin and eyes. Do not breathe vapors, mist, spray, fume.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ground/bond container and receiving equipment.

Storage conditions : Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up.

Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources. ignition sources.

Storage area : Store away from heat. Store in a cool, dry place.

Special rules on packaging : correctly labelled. meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

phosphoric acid, conc=75%, aqueous solution (7664-38-2)		
ACGIH	ACGIH TWA (mg/m³)	1 mg/m³
ACGIH	ACGIH STEL (mg/m³)	3 mg/m³

2-propanol (67-63-0)		
ACGIH	ACGIH TWA (ppm)	200 ppm
ACGIH	ACGIH STEL (ppm)	400 ppm
ACGIH	Remark (ACGIH)	Eye & URT irr; CNS impair
OSHA	OSHA PEL (TWA) (mg/m³)	980 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	400 ppm

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.

Hand protection : Protective gloves.

Eye protection : Safety glasses.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: Clear Colorless
Odor	: Alcohol
Odor threshold	: No data available
pH	: 2.01 1% Solution
Melting point/Melting range	: No data available
Freezing point	: No data available
Boiling point/Boiling range	: No data available
Flash point	: 69.8 °F
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability	: 21 Celcius
Explosion limits	: Not applicable
Explosive properties	: Not applicable
Oxidizing properties	: No data available
Vapor pressure	: No data available
Density/Relative density/Bulk Density	: 8.38 lbs/gal
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1 g/ml
Solubility	: Soluble in water
Log Pow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, No sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Double L Spreader-Buffer	
LD50 oral rat	1352.75 mg/kg
ATE US (oral)	1352.750 mg/kg body weight

phosphoric acid, conc=75%, aqueous solution (7664-38-2)	
LD50 oral rat	4400 mg/kg (Rat)
LD50 dermal rabbit	2470 mg/kg
LC50 inhalation rat (ppm)	100 ppm
ATE US (oral)	4400.000 mg/kg body weight
ATE US (dermal)	2470.000 mg/kg body weight

2-propanol (67-63-0)	
LD50 oral rat	5045 mg/kg (Rat; OECD 401: Acute Oral Toxicity; Experimental value; 5840 mg/kg bodyweight; Rat)
LD50 dermal rabbit	12870 mg/kg (Rabbit; Experimental value; Equivalent or similar to OECD 402; 16.4; Rabbit)
LC50 inhalation rat (mg/l)	73 mg/l/4h (Rat)
ATE US (oral)	5045.000 mg/kg body weight
ATE US (dermal)	12870.000 mg/kg body weight
ATE US (vapors)	73.000 mg/l/4h
ATE US (dust, mist)	73.000 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 2.06 1% Solution

Serious eye damage/irritation : Causes serious eye damage.
pH: 2.06 1% Solution

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

2-propanol (67-63-0)	
IARC group	3 - Not Classifiable

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified.

Specific target organ toxicity (repeated exposure) : Not classified.

Aspiration hazard : Not classified

Symptoms/injuries after inhalation : May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Burns.

Symptoms/injuries after eye contact : Serious damage to eyes.

Symptoms/injuries after ingestion : Burns.

SECTION 12: Ecological information

12.1. Toxicity

phosphoric acid, conc=75%, aqueous solution (7664-38-2)	
LC50 fish 1	138 mg/l (96 h; Pisces; Pure substance)
LC50 other aquatic organisms 1	240 mg/l (96 h; Protozoa; Pure substance)
LC50 fish 2	100 - 1000 mg/l (Pisces; Pure substance)
LC50 other aquatic organisms 2	100 - 1000 mg/l (Pure substance)
TLM fish 1	138 ppm (24 h; Gambusia affinis; Pure substance)
Threshold limit other aquatic organisms 1	240 mg/l (96 h; Protozoa; Pure substance)
Threshold limit other aquatic organisms 2	100 - 1000,Pure substance

2-propanol (67-63-0)	
LC50 fish 1	4200 mg/l (96 h; Rasbora heteromorpha; Flow-through system)
EC50 Daphnia 1	> 10000 mg/l (48 h; Daphnia magna)
LC50 fish 2	9640 mg/l (96 h; Pimephales promelas; Lethal)

2-propanol (67-63-0)	
EC50 Daphnia 2	13299 mg/l (48 h; Daphnia magna)
Threshold limit algae 1	> 1000 mg/l (72 h; Scenedesmus subspicatus; Growth rate)
Threshold limit algae 2	1800 mg/l (72 h; Algae; Cell numbers)

12.2. Persistence and degradability

phosphoric acid, conc=75%, aqueous solution (7664-38-2)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

2-propanol (67-63-0)	
Persistence and degradability	Readily biodegradable in water. Biodegradable in the soil. Biodegradable in the soil under anaerobic conditions. No (test)data on mobility of the substance available.
Biochemical oxygen demand (BOD)	1.19 g O_2/g substance
Chemical oxygen demand (COD)	2.23 g O_2/g substance
ThOD	2.40 g O_2/g substance
BOD (% of ThOD)	0.49 % ThOD

12.3. Bioaccumulative potential

phosphoric acid, conc=75%, aqueous solution (7664-38-2)	
Log Pow	-0.77 (Estimated value)
Bioaccumulative potential	Bioaccumulation: not applicable.

2-propanol (67-63-0)	
Log Pow	0.05 (Experimental value)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4).

12.4. Mobility in soil

2-propanol (67-63-0)	
Surface tension	0.021 N/m (25 °C)

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations : Prevent liquid from entering sewers, watercourses, underground or low areas.

Additional information : Flammable vapors may accumulate in the container.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN2924 Flammable liquids, corrosive, n.o.s. (Isopropyl alcohol/ Phosphoric Acid Solution), 3, II

UN-No.(DOT) : UN2924

Proper Shipping Name (DOT) : Flammable liquids, corrosive, n.o.s.
Isopropyl alcohol/ Phosphoric Acid Solution

Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120

<tx:_T_04701> (DOT) : 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT)	:	3 - Flammable liquid 8 - Corrosive

Packing group (DOT)	:	II - Medium Danger
DOT Packaging Non Bulk (49 CFR 173.xxx)	:	202
DOT Packaging Bulk (49 CFR 173.xxx)	:	243
DOT Symbols	:	G - Identifies PSN requiring a technical name
DOT Special Provisions (49 CFR 172.102)	:	IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized T11 - 6 178.274(d)(2) Normal..... 178.275(d)(3) TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively TP27 - A portable tank having a minimum test pressure of 4 bar (400 kPa) may be used provided the calculated test pressure is 4 bar or less based on the MAWP of the hazardous material, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP
DOT Packaging Exceptions (49 CFR 173.xxx)	:	150
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	:	1 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	:	5 L
DOT Vessel Stowage Location	:	B - (i) The material may be stowed ‘‘on deck’’ or ‘‘under deck’’ on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) ‘‘On deck only’’ on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded
DOT Vessel Stowage Other	:	40 - Stow ‘‘clear of living quarters’’
Emergency Response Guide (ERG) Number	:	132
Other information	:	No supplementary information available.

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

phosphoric acid, conc=75%, aqueous solution (7664-38-2)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Not listed on SARA Section 313 (Specific toxic chemical listings)	
CERCLA RQ	5000 lb

2-propanol (67-63-0)
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)

15.2. International regulations

CANADA
No additional information available

EU-Regulations
No additional information available

National regulations
No additional information available

15.3. US State regulations

phosphoric acid, conc=75%, aqueous solution (7664-38-2)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) List

2-propanol (67-63-0)
U.S. - New Jersey - Right to Know Hazardous Substance List

SECTION 16: Other information

Revision date : 11/21/2017

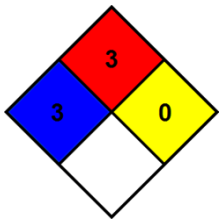
Full text of H-phrases:

H225	Highly flammable liquid and vapor
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H336	May cause drowsiness or dizziness
H332	Harmful if inhaled

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard : 3 - Liquids and solids that can be ignited under almost all ambient conditions.

NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



SDS US (GHS HazCom 2012)

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